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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/713,024	11/16/2000	Masato Mitsuhashi	108066-00018	3168

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EXAMINER
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KING, JUSTIN

ART UNIT	PAPER NUMBER
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2181

DATE MAILED: 05/23/2003

3

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/713,024

Applicant(s)

MITSUHASHI ET AL.

Examiner

Justin I. King

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 November 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                 | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____   |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)        | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ | 6) <input type="checkbox"/> Other: ____                                     |

## **DETAILED ACTION**

### ***Specification***

1. The abstract of the disclosure is objected to because it exceeds the maximum of 150 words. Correction is required. See MPEP § 608.01(b).

### ***Drawings***

2. Figures 2 and 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

3. Claim 1 is objected to because of the following informalities: Claim 1 recites the limitation "one first clock edge" in page 1's line 15 and "one second clock edge" in page 2's line 1. There are antecedent bases for "first clock edge" in page 1's line 11 and "second clock edges" in page 1's line 24, it is unclear whether the one first clock edge in page 1's line 15 is referring back to the first clock edge in line 11 and the one second clock edge in page 2's line 1 referring back to the second clock edges in page 1's line 24. Applicant may meant "one of the first clock edges" and "one of the second clock edges" respectively. Appropriate correction is required.
4. Claim 1 is also objected to because of the following informalities: Claim 1 recites the limitation "whose number is the stage number" in page 1's line 12. The language is ambiguous

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on whether this is referring to the first selection signal or the first clock edges. Further clarification is needed.

5. Claim 1 is also objected to because of the following informalities: Claim 1 misspells the "prohibiting" to "prohibitting" in line 17. Appropriate correction is required.

6. Claim 4 is objected to because of the following informalities: Claim 4 recites "is capable of being" in page 2's line 27. Examiner recommends changing it to "is". Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the disconnection" in lines 7-8. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the final-stage flip-flop" in lines 10, 14, 22-23, and 26-27. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the first clock edges" in lines 11-12. There is insufficient antecedent basis for this limitation in the claim.

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Claim 1 recites the limitation "the stage number" in lines 12 and 25. There is insufficient antecedent basis for this limitation in the claim. Examiner recommends changing the "the stage number of the first flip-flop group" to "the first flip-flop group's stage number".

Claim 1 recites the limitation "the second clock edges" in line 24. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the number" in page 2's line 6. There is insufficient antecedent basis for this limitation in the claim. Examiner recommends changing "the number of stages of said second flip-flop group" to "said second flip-flop group's stage number".

Claim 1 recites the limitation "the relationship" in page 2's line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the frequency" in page 2's line 8. There is insufficient antecedent basis for this limitation in the claim.

Claims 2-4 are rejected because they incorporate claim 1's limitations.

Claim 4 recites the limitation "the number" in page 2's line 26. There is insufficient antecedent basis for this limitation in the claim.

***Allowable Subject Matter***

9. Claims 1-4 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

10. The following is a statement of reasons for the indication of allowable subject matter:

Referring to claim 1: A clock switching circuit that switches between asynchronous first and second clocks according to whether an interface cable, having a hot-plug function, comprises a first flip-flop group that receives an interface disconnection signal that corresponds to the

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disconnection or connection of the interface cable in response to said first clock, wherein when the interface cable is disconnected, the first flip-flop group's final-stage flip-flop thereof outputs a first selection signal through first clock edges, and when said interface cable is connected, the final-stage flip-flop outputs a first no-selection signal through the first clock's edge, said first flip-flop group outputting said first clock in response to said first selection signal, and prohibiting output of said first clock in response to said first no-selection signal; a second flip-flop group that receives said interface disconnection signal in response to said second clock, wherein when said interface cable is connected, the second flip-flop group's final-stage flip-flop thereof outputs a second selection signal through the second clock edges which is the stage number of the second flip-flop group, and when said interface cable is disconnected, the final-stage flip-flop outputs a second no-selection signal through second clock edge, said second flip-flop group outputting said second clock in response to said second selection signal, and prohibiting output of said second clock in response to said second no-selection signal; and where the second flip-flop group's stage number is greater than the that of said first flip-flop group according to the relationship between the frequency of said first and second clocks.

Referring to claims 2-4: Claims are allowable because they incorporate claim 1's allowable subject matter.

*Conclusion*

11. The prior art made of recorded and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,249,149 to Pedersen, Bruce.

U.S. Patent No. 5,652,536 to Nookala et al..

U.S. Patent No. 6,496,050 to Lloyd, Alan.

U.S. Patent No. 6,075,392 to Sandner, Christoph.

U.S. Patent No. 6,501,304 to Boerstler et al..

U.S. Patent No. 6,456,146 to Darmon et al..

U.S. Patent No. 6,453,425 to Hede et al..

U.S. Patent No. 6,411,134 Manz et al..

U.S. Patent No. 6,266,780 to Grundvig et al..

U.S. Patent No. 6,345,328 to Rozario et al..

U.S. Patent No. 6,349,387 to Blomgren et al..

U.S. Patent No. 5,784,598 to Griffith, Jenni L..

U.S. Patent No. 6,438,697 to Atkinson, lee Warren.

U.S. Patent No. 5,877,636 to Truong et al..

U.S. Patent No. 5,821,781 to Rigazio, Luca.

U.S. Patent No. 6,009,531 to Selvidge et al..

U.S. Patent No. 5,694,176 to Bruette et al..

U.S. Patent No. 6,564,279 to Neil et al..

U.S. Patent No. 6,308,233 to Park, Dong-Hyun.

U.S. Patent No. 5,809,291 to Munoz-Bustamante et al..

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U.S. Patent No. 6,134,621 to Kelly et al..

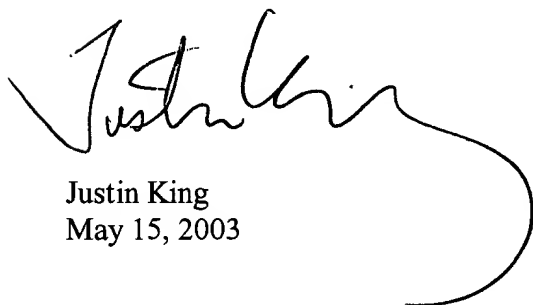
U.S. Patent No. 6,484,222 to Olson et al..

U.S. Patent No. 6,253,267 to Kim et al..

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin King whose telephone number is (703) 305-4571. The examiner can normally be reached on Monday through Friday from 9:00 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephones are unsuccessfully, the examiner's supervisor, Mark Reinhart can be reached at (703) 308-3110.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose number is (703)-306-5631.



Justin King  
May 15, 2003

*Gopal C. Ray*  
**GOPAL C. RAY**  
**PRIMARY EXAMINER**  
**GROUP 2300**